Performance of the Scottish Education System & Raising Attainment of All Learners
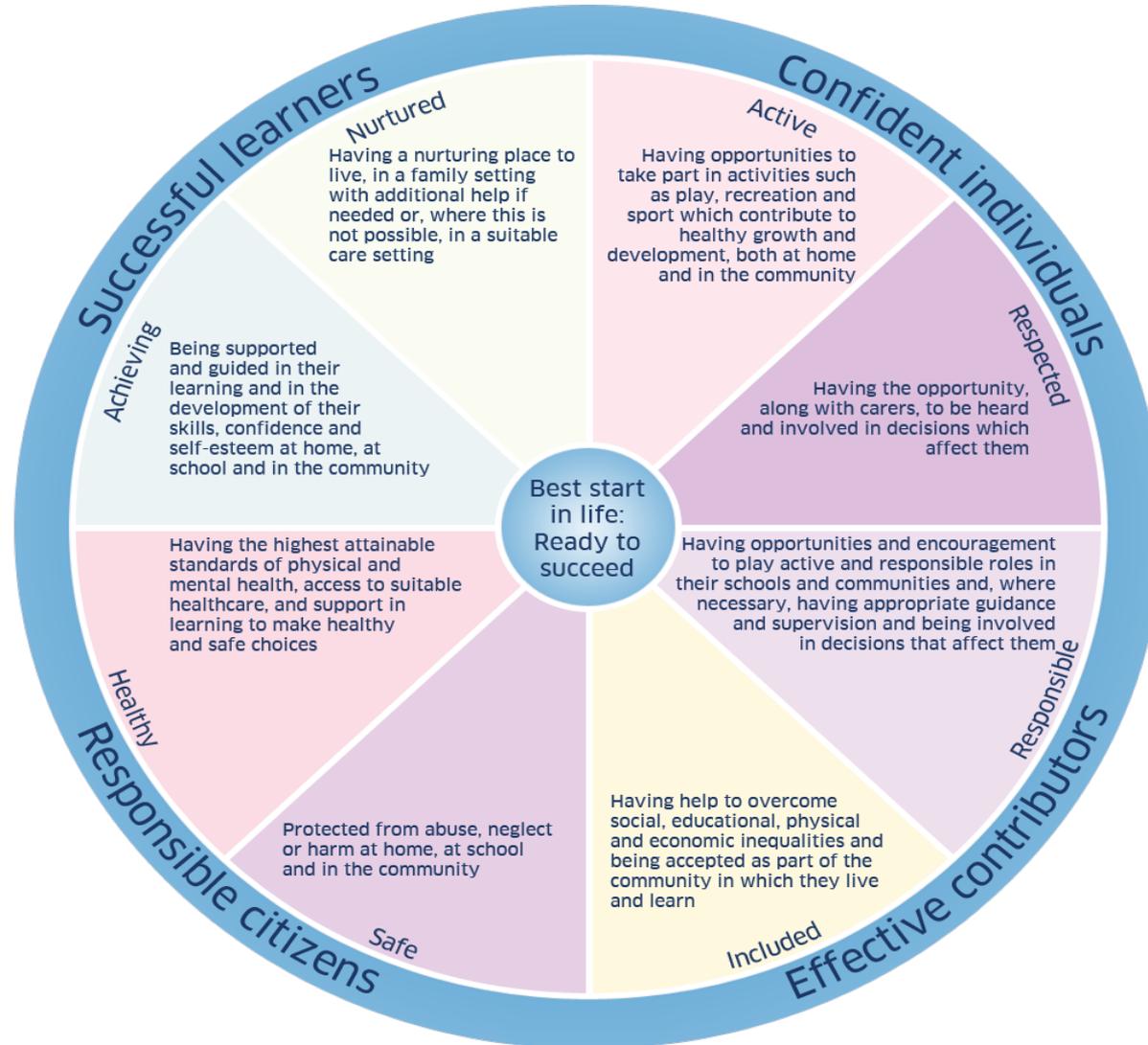
Maggie Tierney

Head of Performance, Governance & ICT in Education
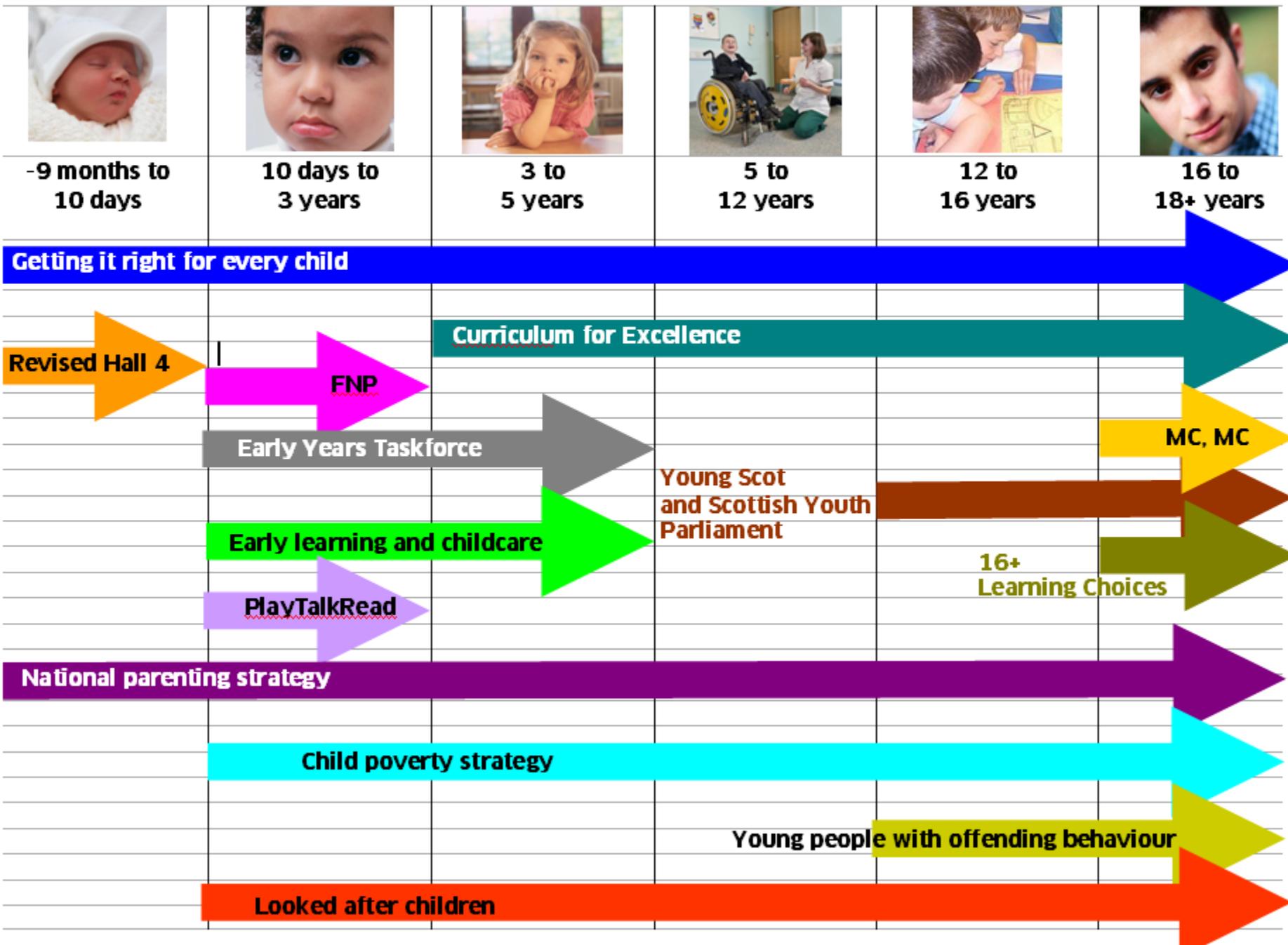
Learning Directorate

Scottish Government

Outcome Focused National Priorities

- The National Performance Framework, geared around 5 national objectives and 15 national outcomes

- NO 3, 4, 5, 7, 8, 15

- Education provision a major vehicle (along with health services) for how we will make good on these aspirations
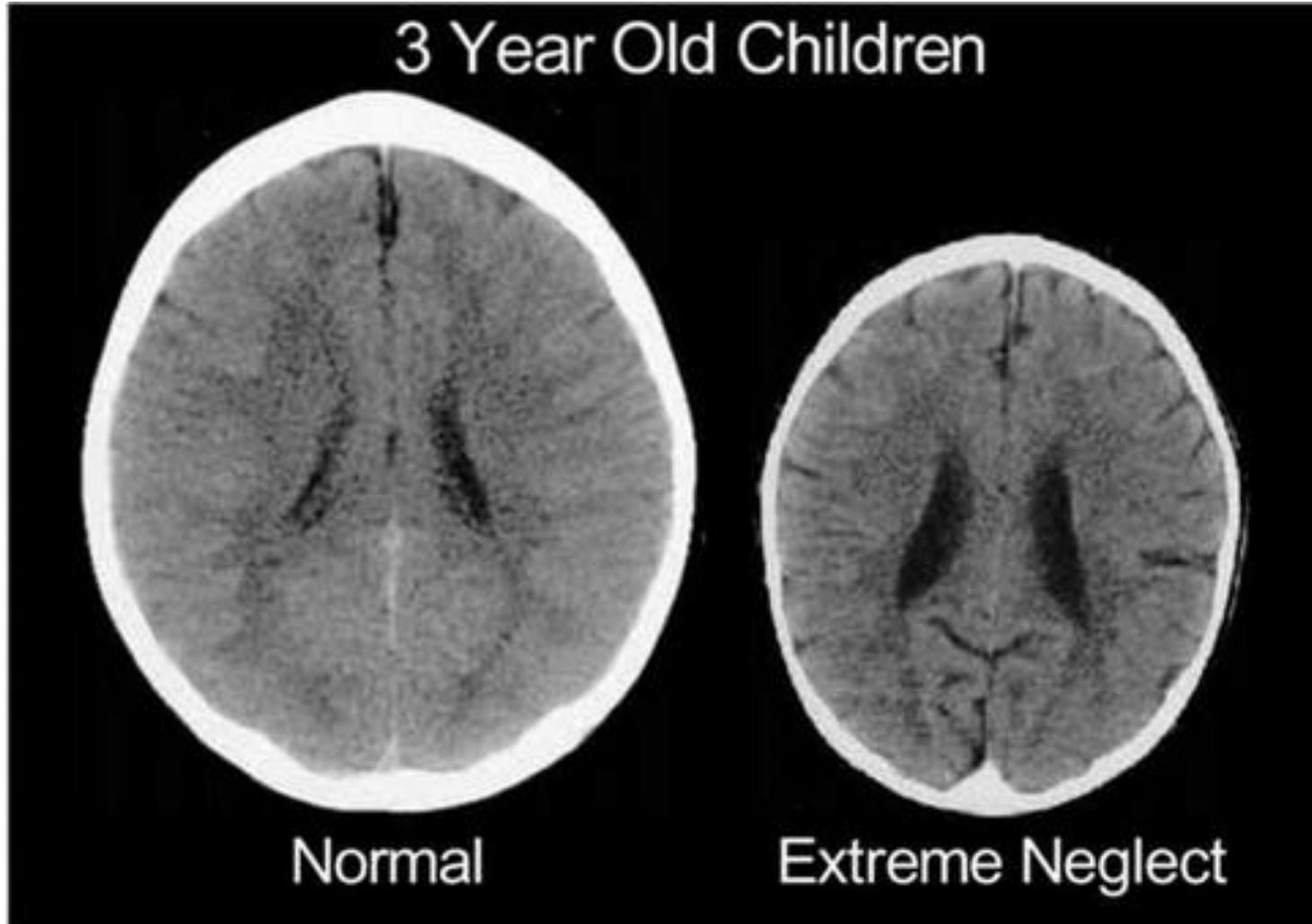
Getting it Right For Every Child

Scotland – the best place to grow up in

-9 months to 10 days	10 days to 3 years	3 to 5 years	5 to 12 years	12 to 16 years	16 to 18+ years

Getting it right for every child

Curriculum for Excellence

Revised Hall 4

FNP

Early Years Taskforce

MC, MC

Young Scot and Scottish Youth Parliament

Early learning and childcare

16+ Learning Choices

PlayTalkRead

National parenting strategy

Child poverty strategy

Young people with offending behaviour

Looked after children

Importance of the Early Years

3 Year Old Children

Normal   Extreme Neglect
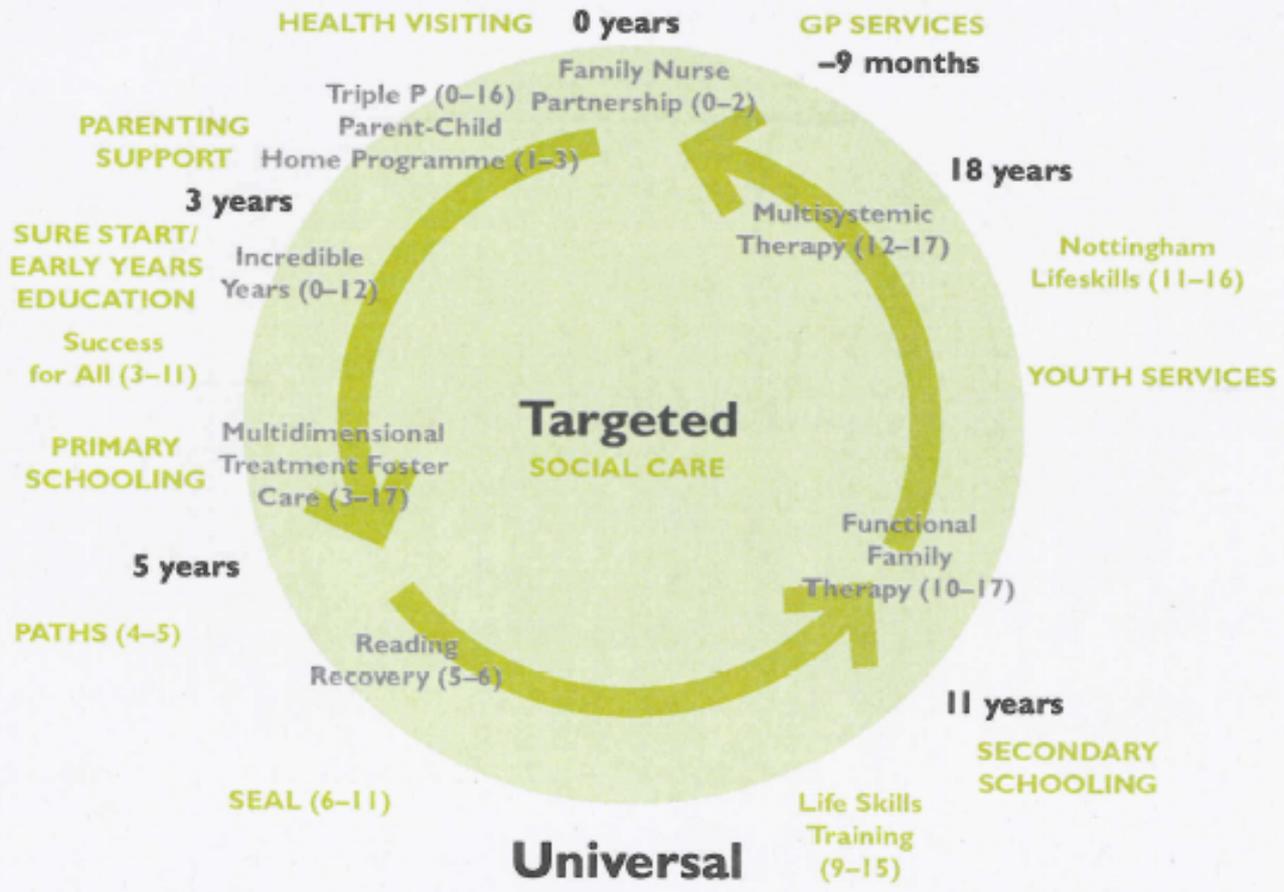
What is early?

Figure 1.1: Effective intervention examples by age

Note: PATHS stands for Promoting Alternative Thinking Strategies and SEAL stands for Social and Emotional Aspects of Learning.

The School Years

..looking reasonably good although not outstanding

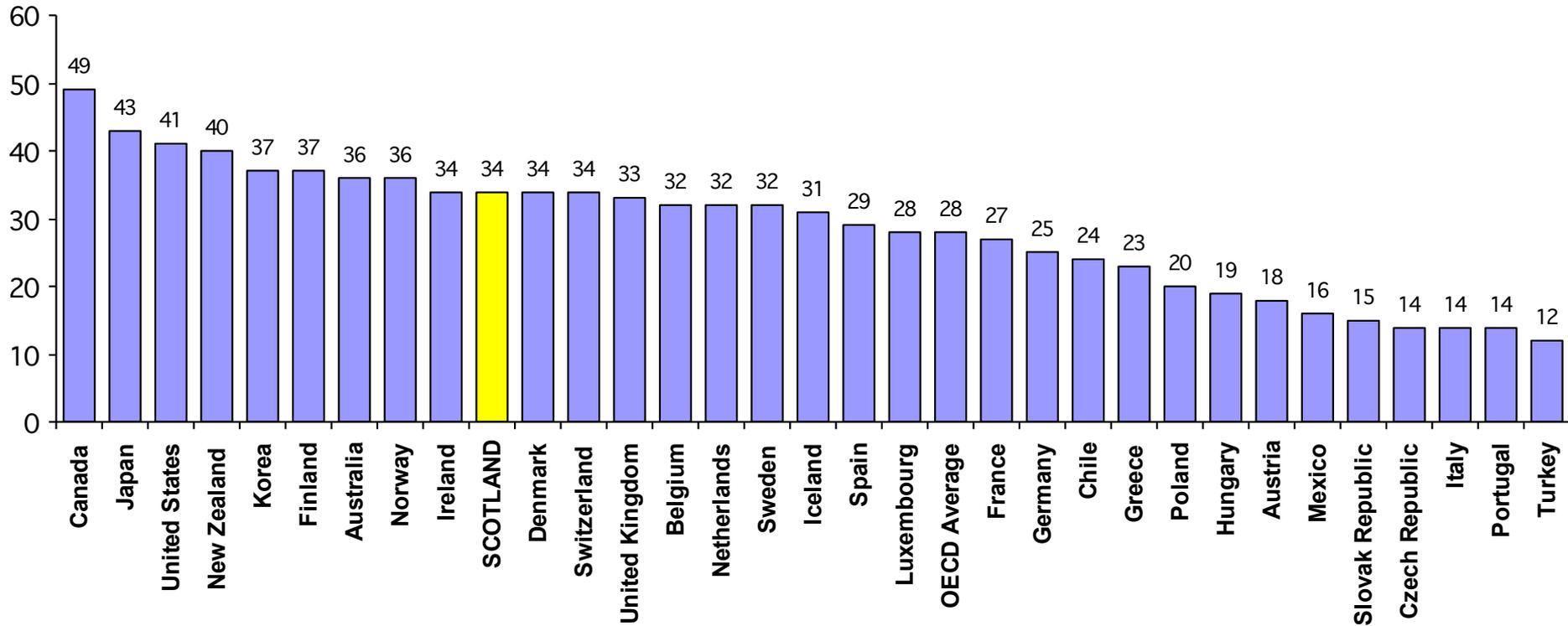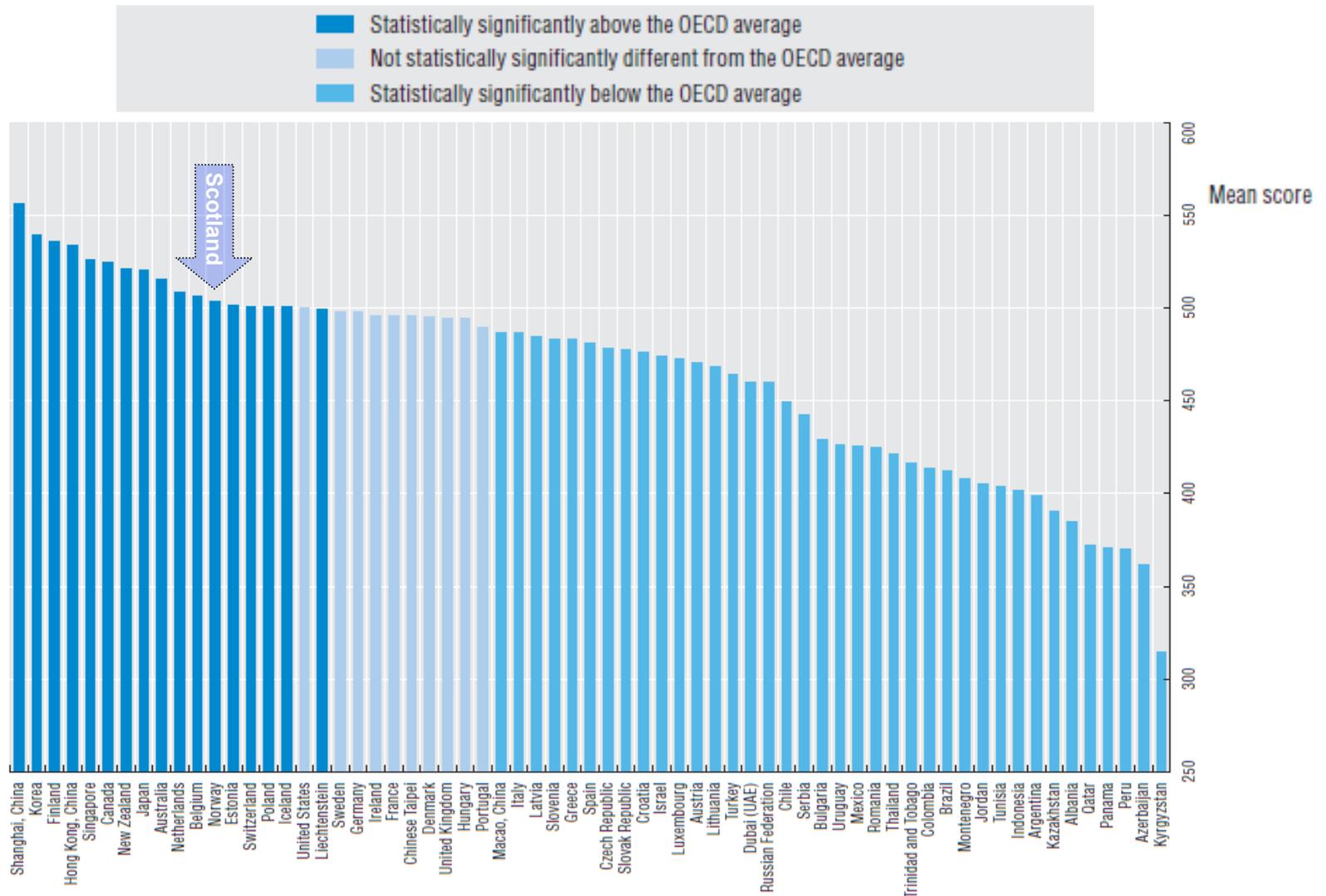## Graduates as proportion of population (25-64 age group), 2008

Country	Value
Canada	49
Japan	43
United States	41
New Zealand	40
Korea	37
Finland	37
Australia	36
Norway	36
Ireland	34
SCOTLAND	34
Denmark	34
Switzerland	34
United Kingdom	33
Belgium	32
Netherlands	32
Sweden	32
Iceland	31
Spain	29
Luxembourg	28
OECD Average	28
France	27
Germany	25
Chile	24
Greece	23
Poland	20
Hungary	19
Austria	18
Mexico	16
Slovak Republic	15
Czech Republic	14
Italy	14
Portugal	14
Turkey	12

Figure 1.2. Comparing performance in reading

Legend:
- Statistically significantly above the OECD average
- Not statistically significantly different from the OECD average
- Statistically significantly below the OECD average

Scotland

Mean score

Shanghai, China; Korea; Finland; Hong Kong, China; Singapore; Canada; New Zealand; Japan; Australia; Netherlands; Belgium; Norway; Estonia; Switzerland; Poland; Iceland; United States; Liechtenstein; Sweden; Germany; Ireland; France; Chinese Taipei; Denmark; United Kingdom; Hungary; Portugal; Macao, China; Italy; Latvia; Slovenia; Greece; Spain; Czech Republic; Slovak Republic; Croatia; Israel; Luxembourg; Austria; Lithuania; Turkey; Dubai (UAE); Russian Federation; Chile; Serbia; Bulgaria; Uruguay; Mexico; Romania; Thailand; Trinidad and Tobago; Colombia; Brazil; Montenegro; Jordan; Tunisia; Indonesia; Argentina; Kazakhstan; Albania; Qatar; Panama; Peru; Azerbaijan; Kyrgyzstan

Source: OECD (2010), PISA 2009 Results, Volume I, What Students Know and Can Do: Student Performance in Reading, Mathematics and Science, Figure I.2.15, available at http://dx.doi.org/10.1787/888932343133.

Figure 1.8. **Comparing performance in science**

Legend:
- Statistically significantly above the OECD average
- Not statistically significantly different from the OECD average
- Statistically significantly below the OECD average

Scotland

Countries (left to right): Shanghai, China; Finland; Hong Kong, China; Singapore; Japan; Korea; New Zealand; Canada; Estonia; Australia; Netherlands; Chinese Taipei; Germany; Liechtenstein; Switzerland; United Kingdom; Slovenia; Macao, China; Poland; Ireland; Belgium; Hungary; United States; Czech Republic; Norway; Denmark; France; Iceland; Sweden; Austria; Latvia; Portugal; Lithuania; Slovak Republic; Italy; Spain; Croatia; Luxembourg; Russian Federation; Greece; Dubai (UAE); Israel; Turkey; Chile; Serbia; Bulgaria; Romania; Uruguay; Thailand; Mexico; Jordan; Trinidad and Tobago; Brazil; Colombia; Montenegro; Argentina; Tunisia; Kazakhstan; Albania; Indonesia; Qatar; Panama; Azerbaijan; Peru; Kyrgyzstan

Figure 1.5. Comparing performance in mathematics

■ Statistically significantly above the OECD average
■ Not statistically significantly different from the OECD average
■ Statistically significantly below the OECD average

Shanghai, China; Singapore; Hong Kong, China; Korea; Chinese Taipei; Finland; Liechtenstein; Switzerland; Japan; Canada; Netherlands; Macao, China; New Zealand; Belgium; Australia; Germany; Estonia; Iceland; Denmark; Slovenia; Norway; France; Slovak Republic; Austria; Poland; Sweden; Czech Republic; United Kingdom; Hungary; Luxembourg; United States; Ireland; Portugal; Spain; Italy; Latvia; Lithuania; Russian Federation; Greece; Croatia; Dubai (UAE); Israel; Turkey; Serbia; Azerbaijan; Bulgaria; Romania; Uruguay; Chile; Thailand; Mexico; Trinidad and Tobago; Kazakhstan; Montenegro; Argentina; Jordan; Brazil; Colombia; Albania; Tunisia; Indonesia; Qatar; Peru; Panama; Kyrgyzstan

…gradual improvement in qualification results

Pupils gaining 5+ awards at SCQF Level 5, 1998/99 to 2009/10

...inspection outcomes show considerable headroom for improvement in many schools

Scotland - ALL Schools QI Summary
April 2008 to March 2011

Schools = 984

Legend:
- Excellent
- Very Good
- Good
- Satisfactory
- Weak
- Unsatisfactory

QIs: Improvements in performance. | Learners experiences | Meeting learning needs | The curriculum | Improvement through self-evaluation
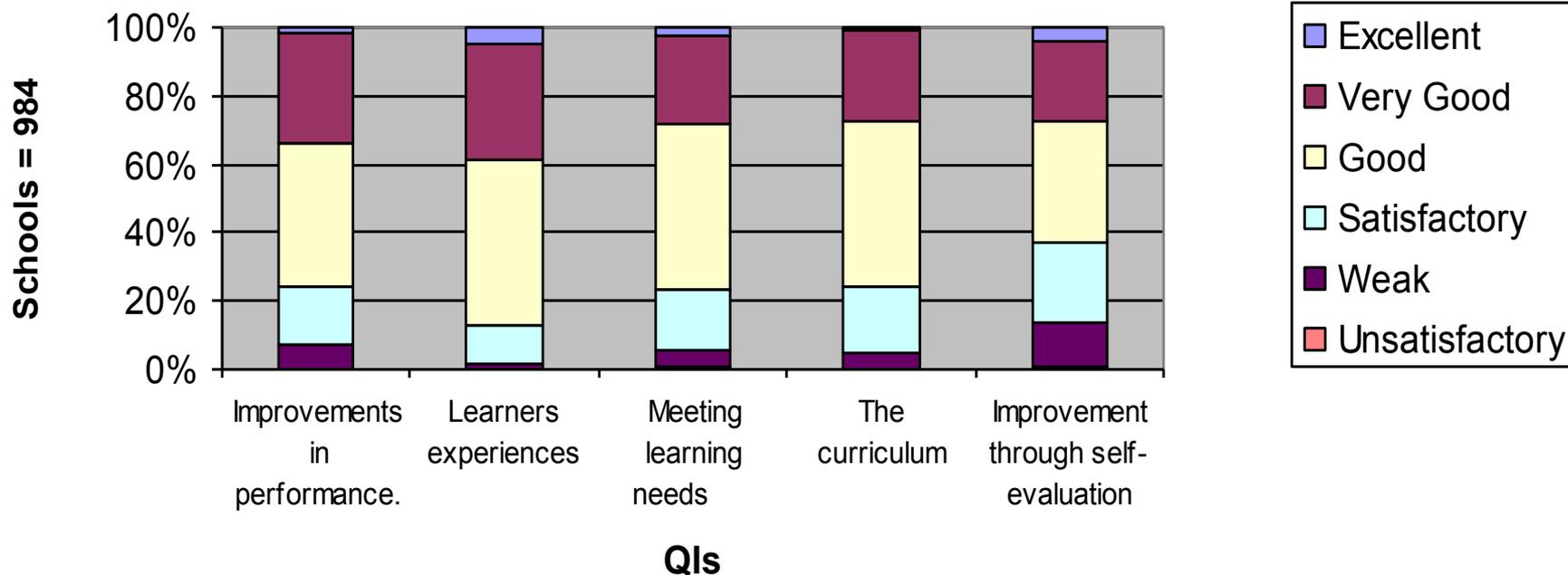
Figure 2.1. Socio-economic background and reading performance

Percentage of variation in reading performance explained by socio-economic background
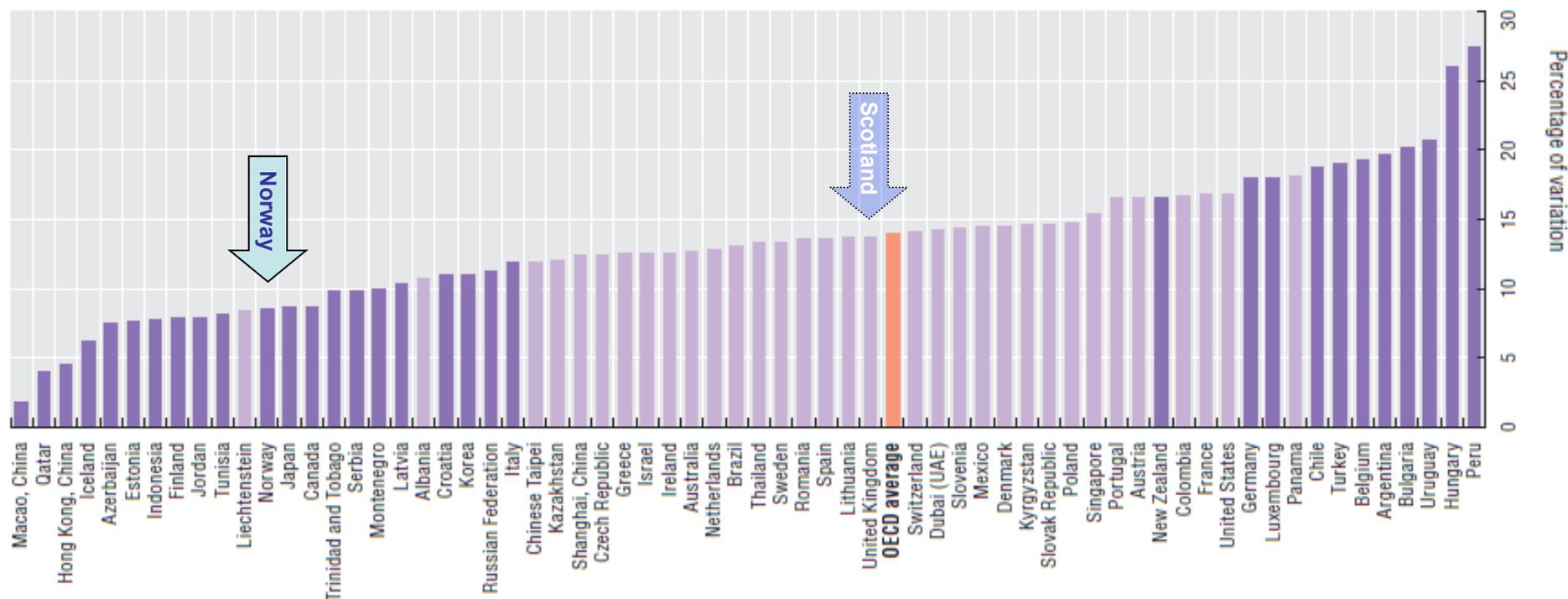
Note: Values that are statistically different from the OECD average are marked in dark violet.

Source: OECD (2010), PISA 2009 Results, Volume II, Overcoming Social Background: Equity in Learning Opportunities and Outcomes, Figures II.3.3 and II.3.4, available at http://dx.doi.org/10.1787/888932343589.

In Scotland today, at age 5, the gap between children from the most advantaged and most disadvantaged families is already:
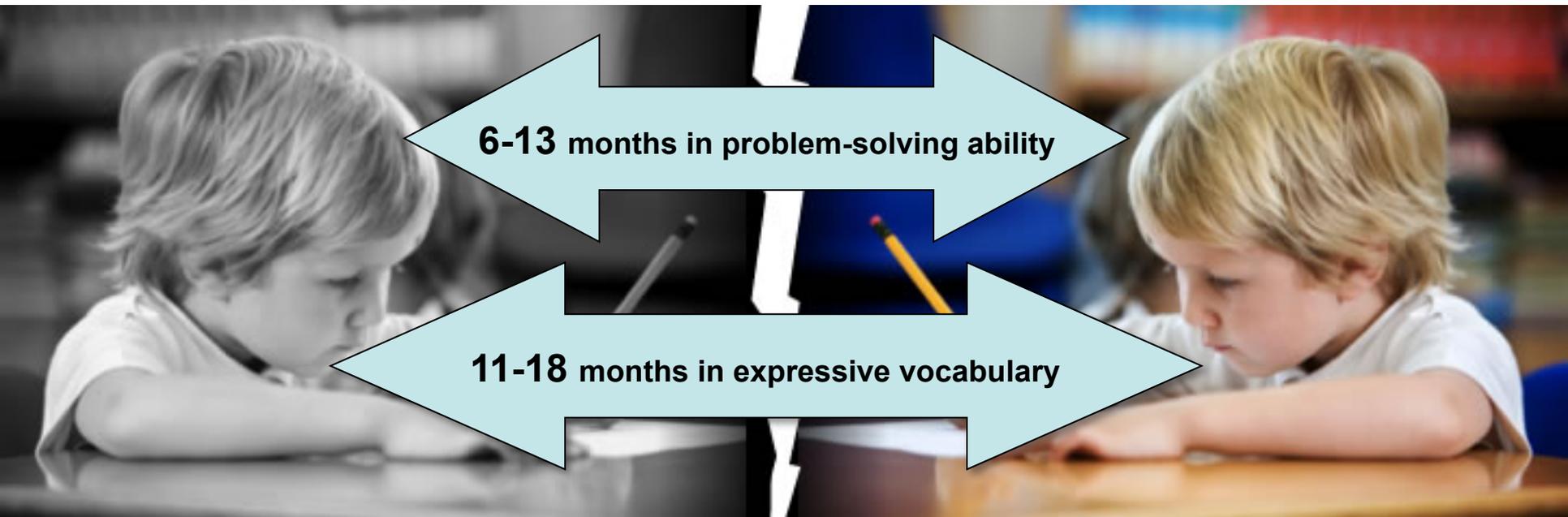
6-13 **months in problem-solving ability**

11-18 **months in expressive vocabulary**

The Challenge

Average tariff score for school leavers, by decile of area deprivation (SIMD)
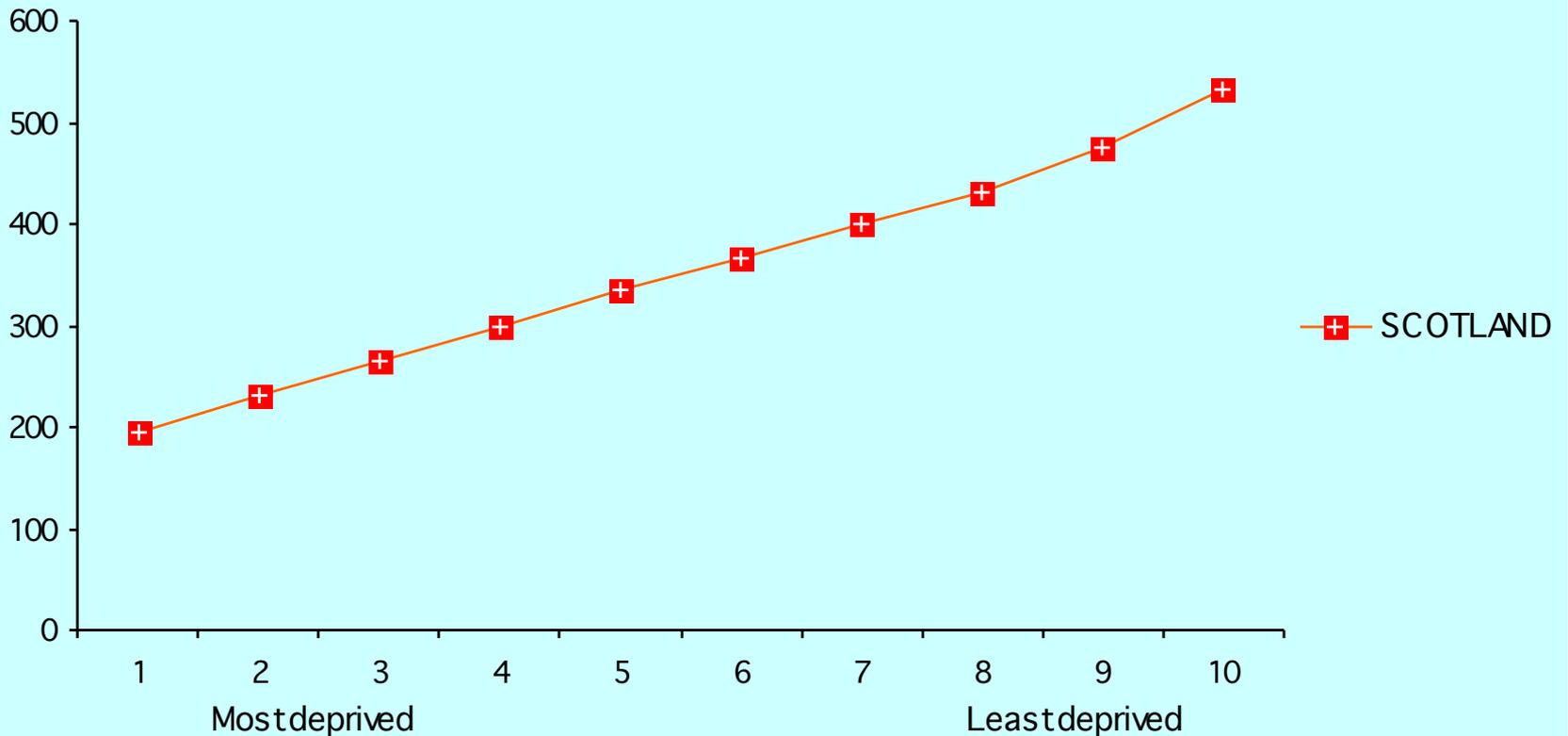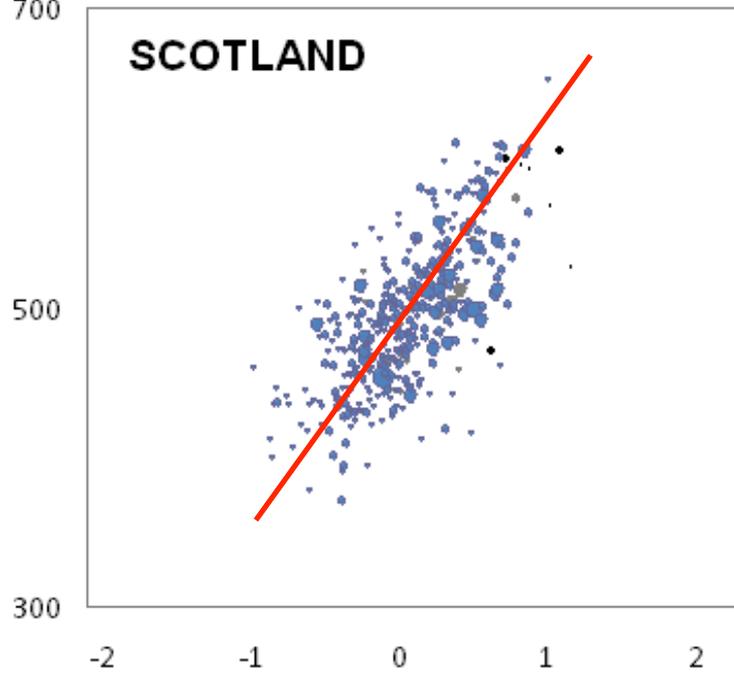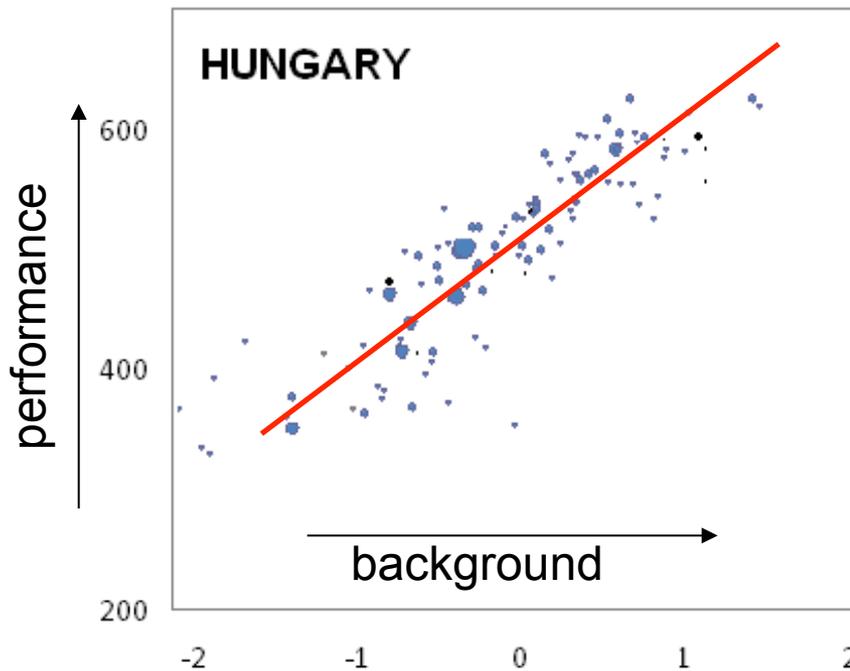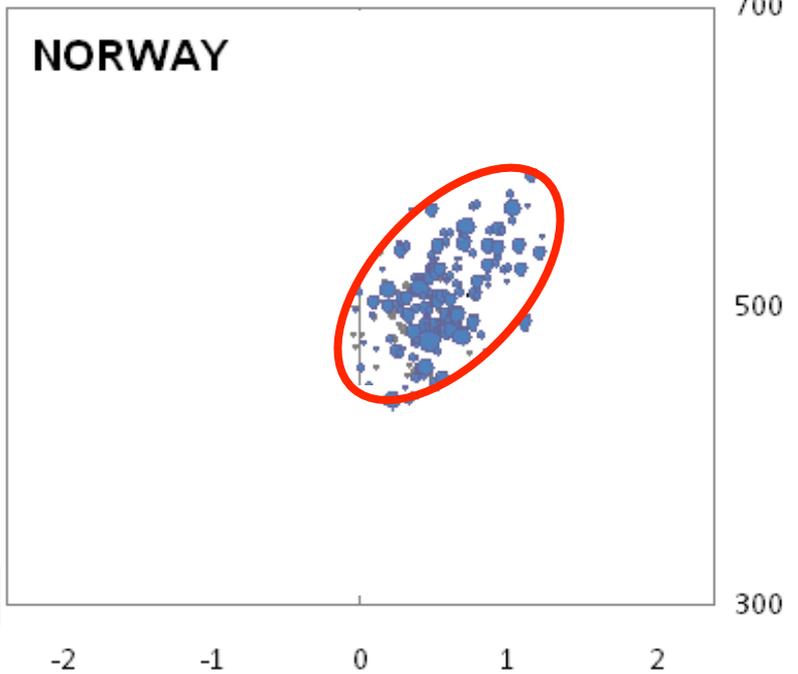
SCOTLAND
- Large difference due to socio-economic factors
- Average amount of breaking away from that pattern

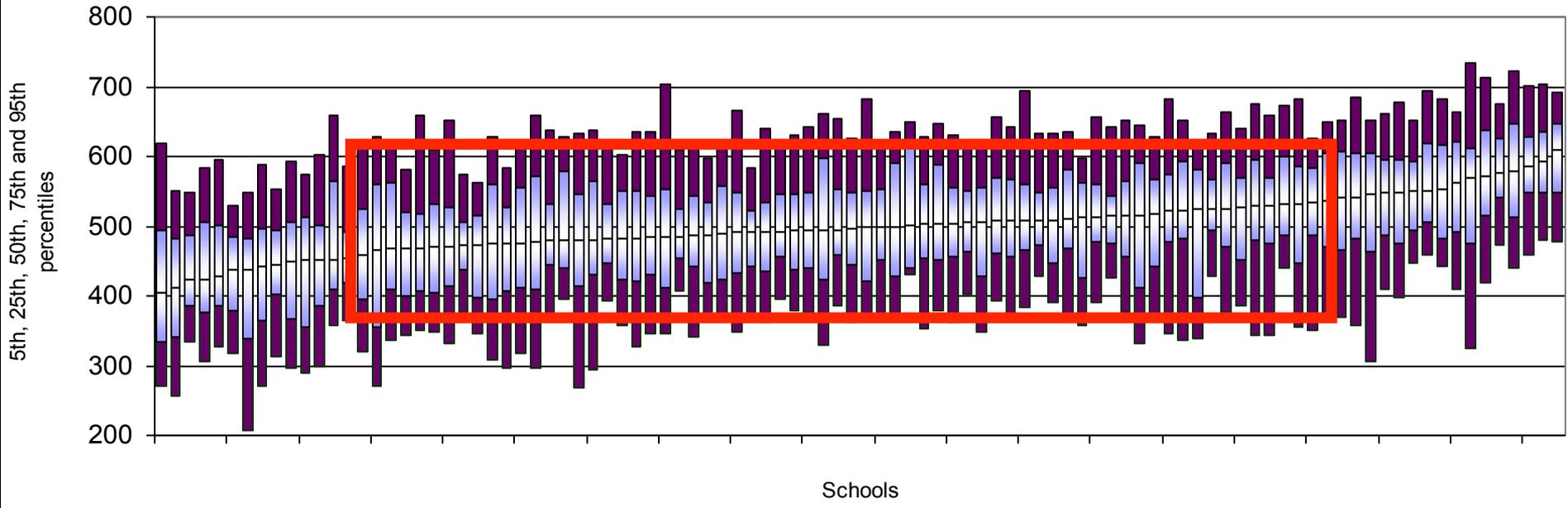PISA 2009

Scottish Survey of Literacy and Numeracy
Numeracy results 2011

SSLN 2011
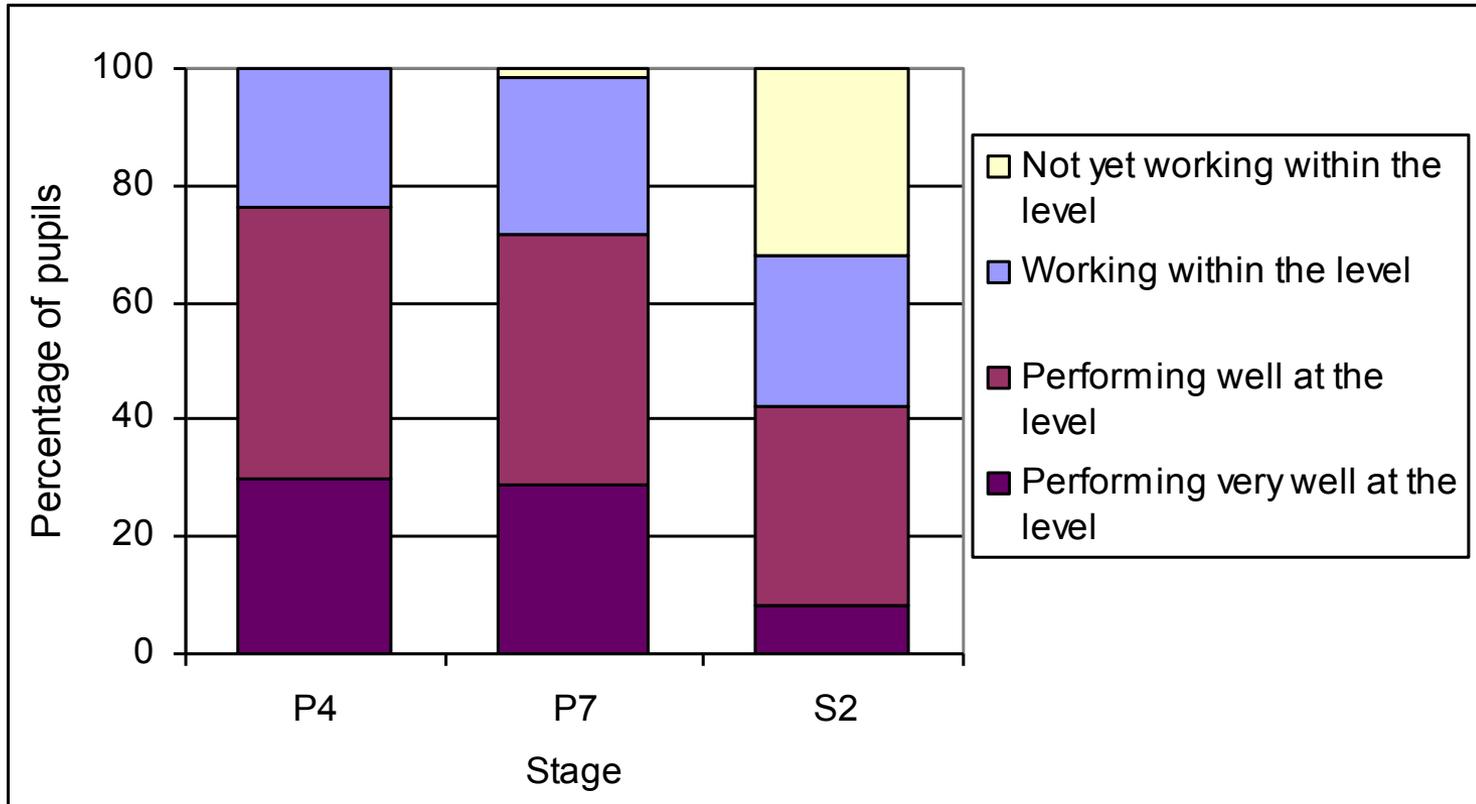
Deprivation and attainment

- Attainment in S4, the last year of compulsory education has increased over the past 8 years
- The gap between pupils in the most deprived and least deprived deciles has not closed

Average tariff score of S4 pupils in the most deprived and least deprived deciles

Y-axis: Average tariff score (0, 50, 100, 150, 200, 250)
X-axis: Year (2002/03, 2003/04, 2004/05, 2005/06, 2006/07, 2007/08, 2008/09, 2009/10)

Legend: ■ Most deprived decile ■ Least deprived decile
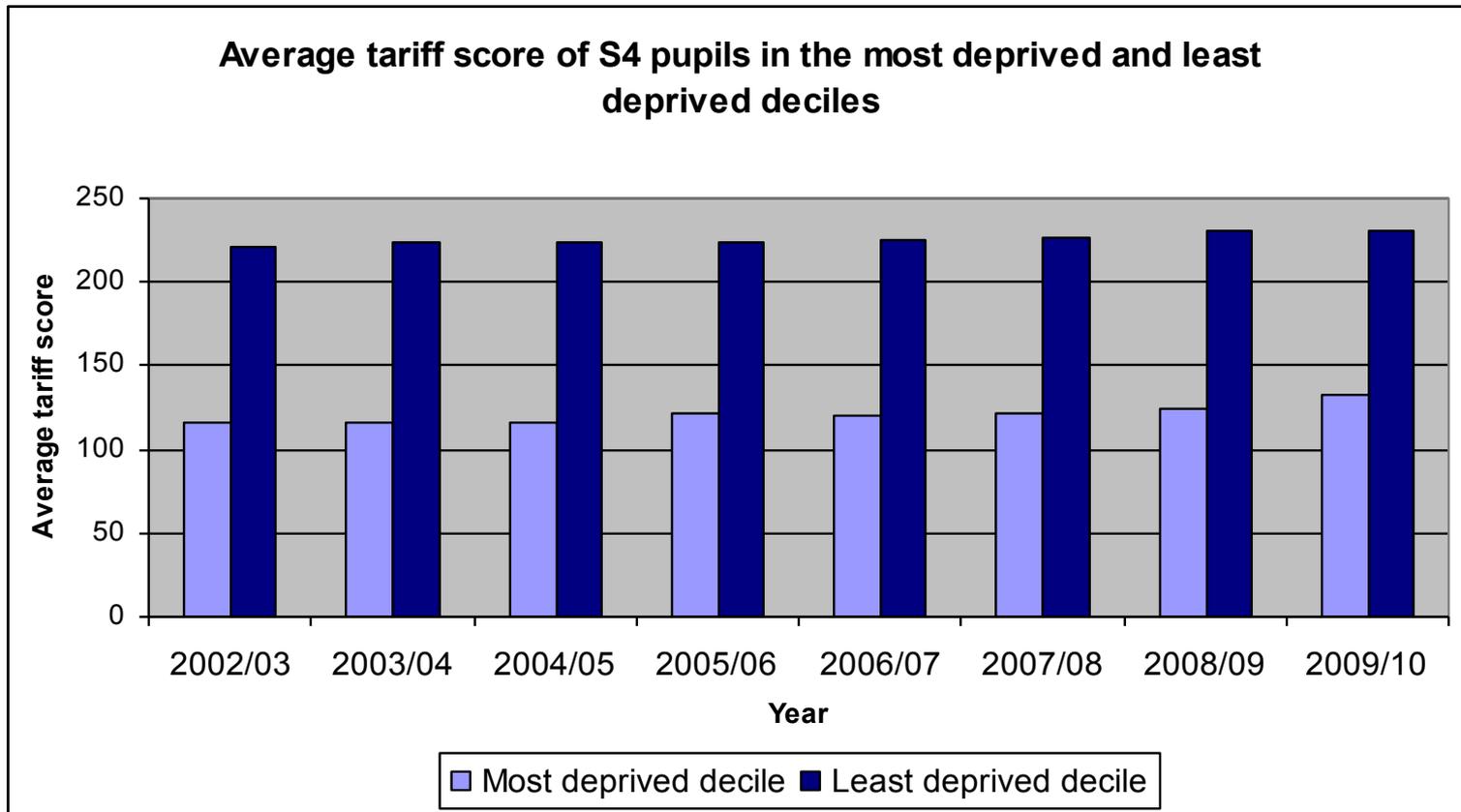
Reading Performance - Scottish Schools 2009

Reading Performance - German Schools 2009

PISA 2009
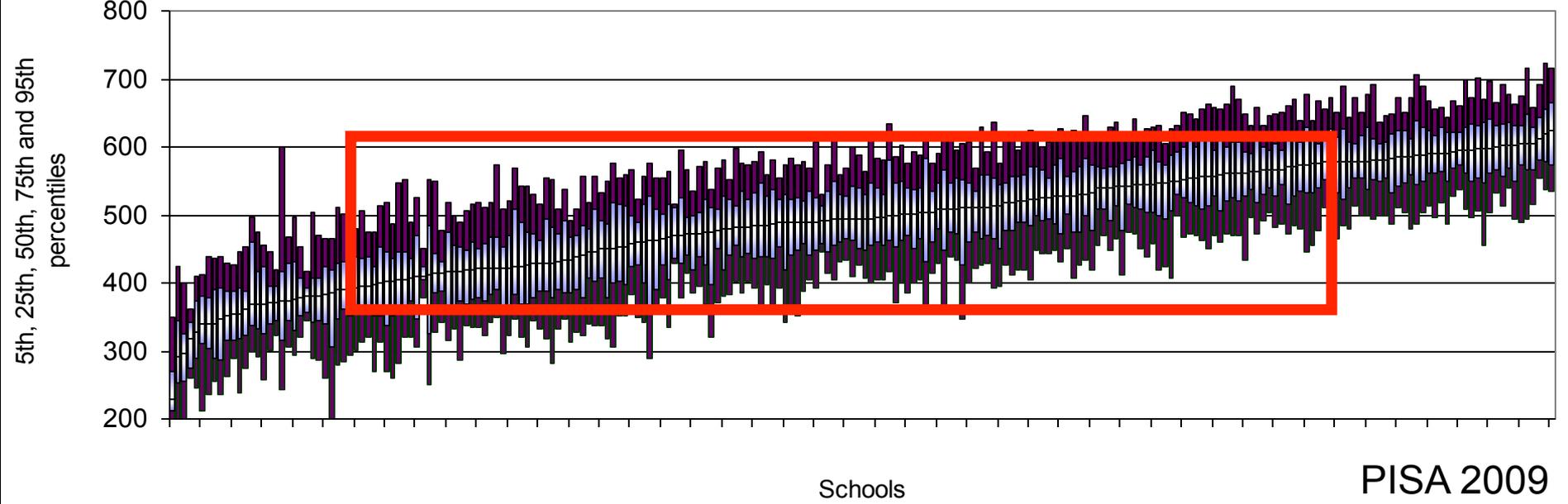
Pupils with additional support needs

- In September 2011, in publicly funded schools, there were 98,523 pupils (just under 15% of the pupils population) with an additional support need recorded.

- The vast majority (93%) of these pupils were in mainstream schools and 88% were fully integrated within mainstream classes.

- 6,973 pupils (just 7% of those with an Additional Support need) were in publicly funded special schools.

- Over the past 3 years, as the collection of information has been widened to include pupils with other non-statutory additional support, the number of pupils with an additional support need recorded has increased from 44,176 in 2009 to 98,523 in 2011.

- Over the last 3 years, the number of pupils in publicly funded special schools has increased slightly from 6,673 in 2009 to 6973 in 2011.

- Limited information is currently published on the attainment of pupils in special schools

Attainment and pupils with additional support needs

- Attainment in S4, for pupils with additional support needs has increased over the past 8 years
- However, the gap between these pupils and those with no additional support needs recorded has not closed

Average tariff score of S4 pupils by additional support needs
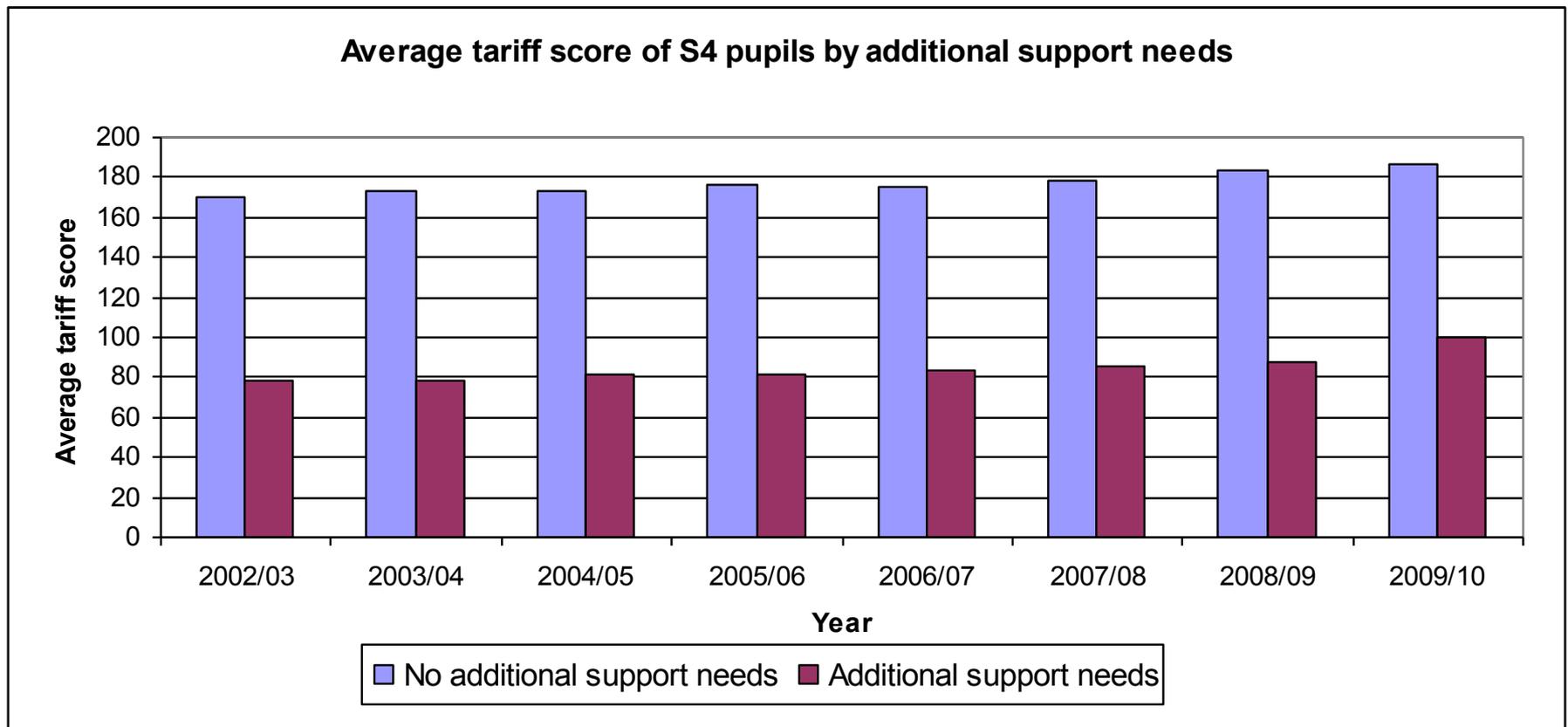
The Challenge
Attainment of Looked After Children

|	All pupils	Looked After
% overall school attendance	93.2	87.8
Overall exclusion rate (per 1,000)	45	365
Average tariff score for school leavers	372	67
% in positive destination at initial survey	87	59
% in positive destination at follow up survey	85	44

Some Successes

Exclusions 06/07-10/11
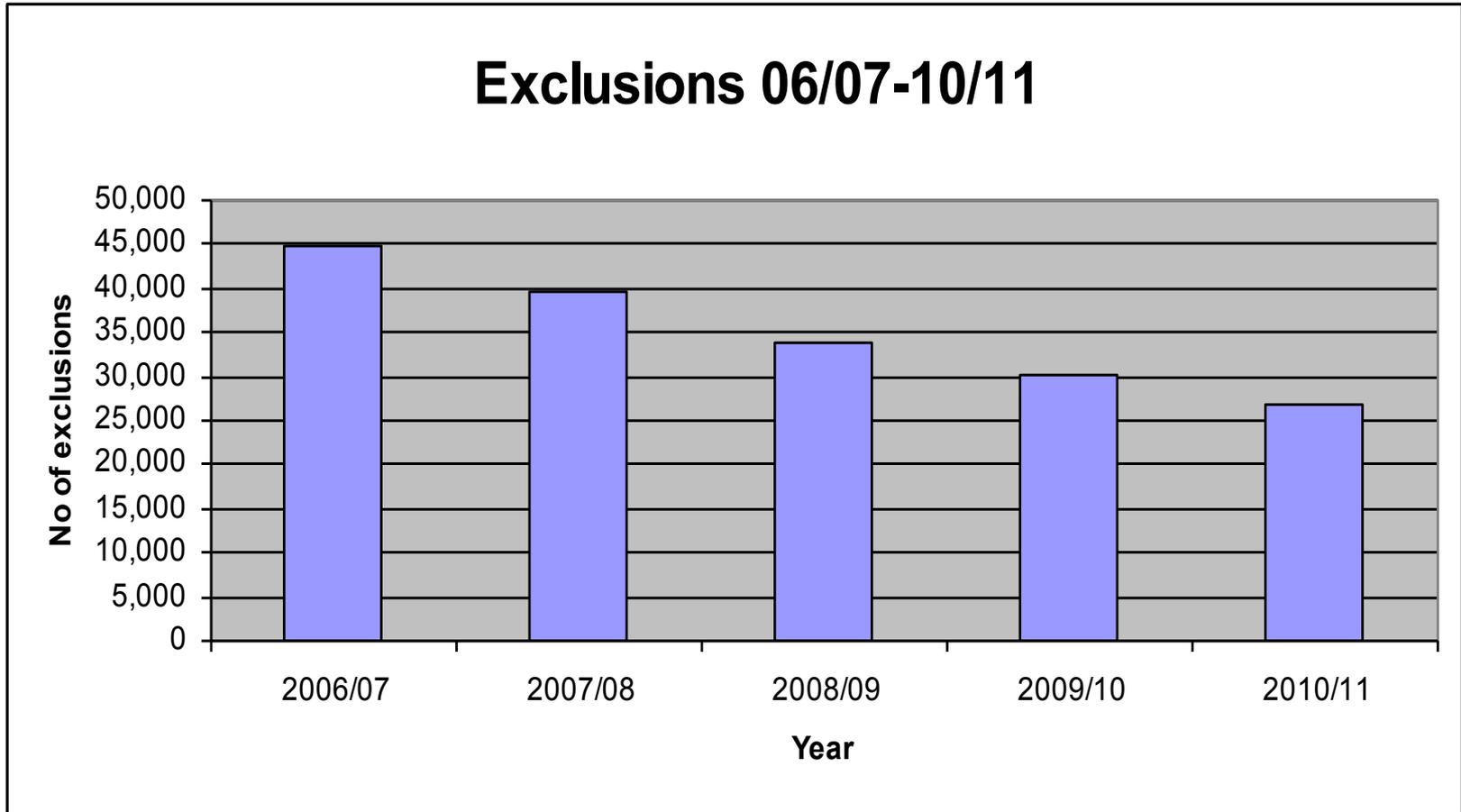
- 40% reduction from peak in 2006/07

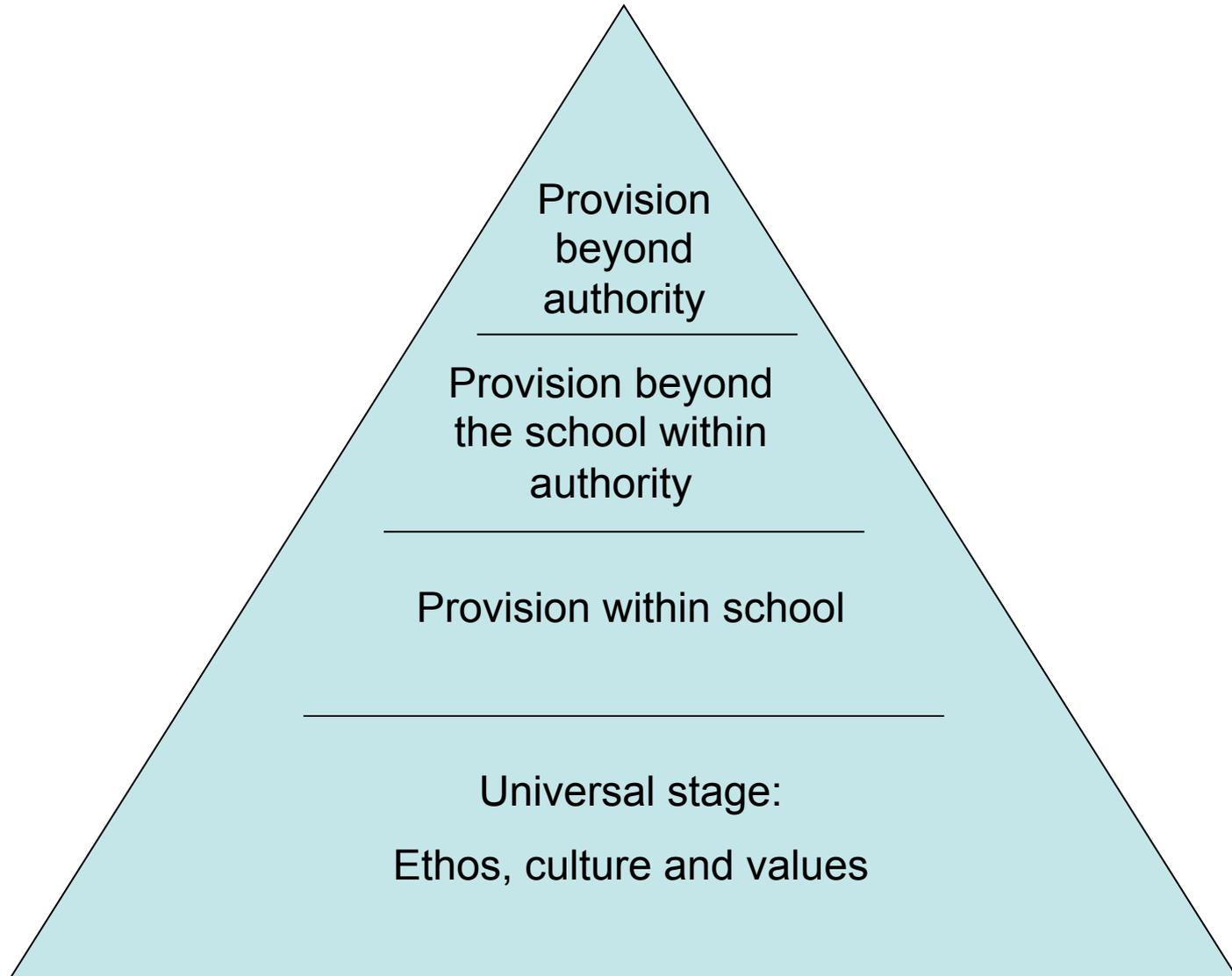# Some Successes

School Leaver Initial Destinations (SLDR)
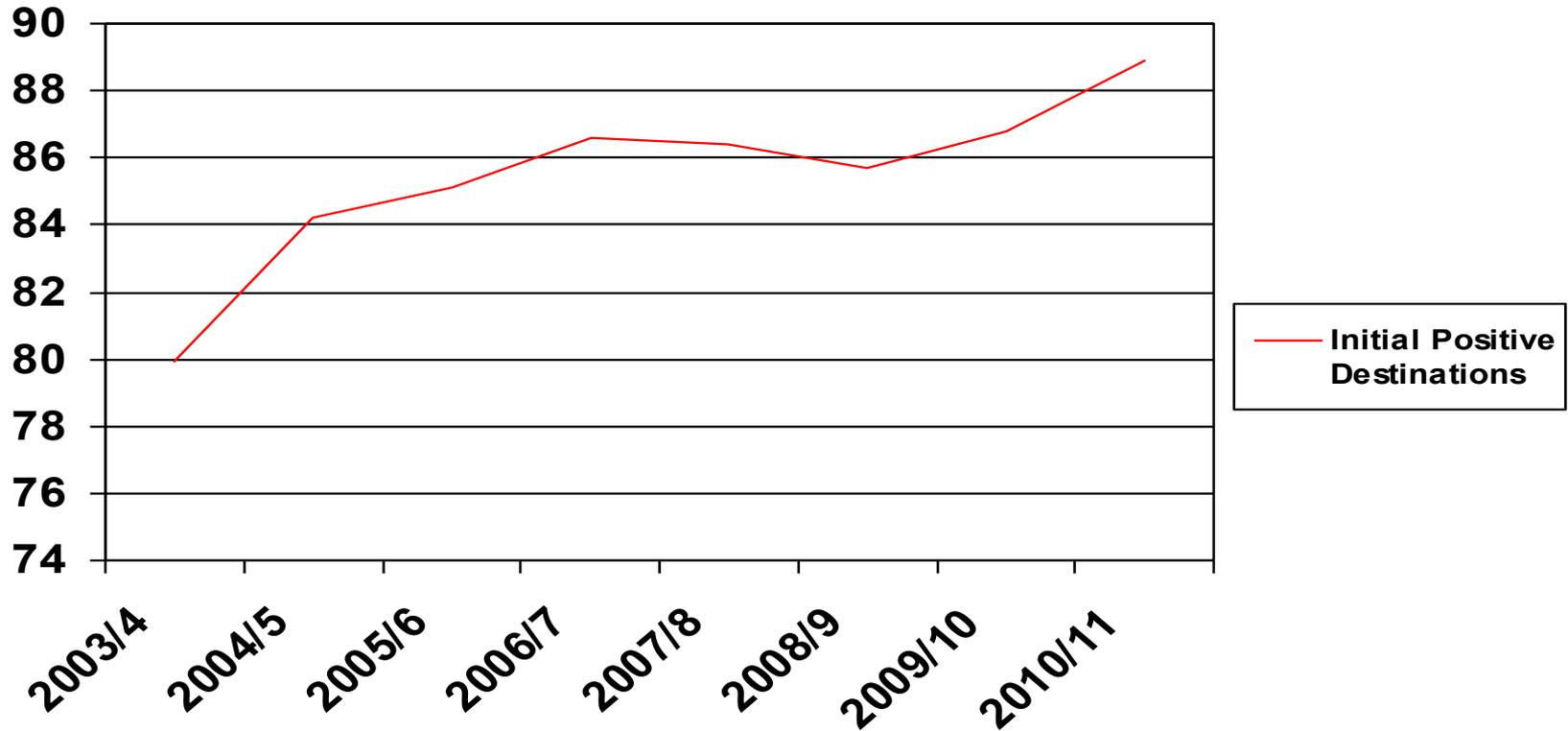
Curriculum for Excellence
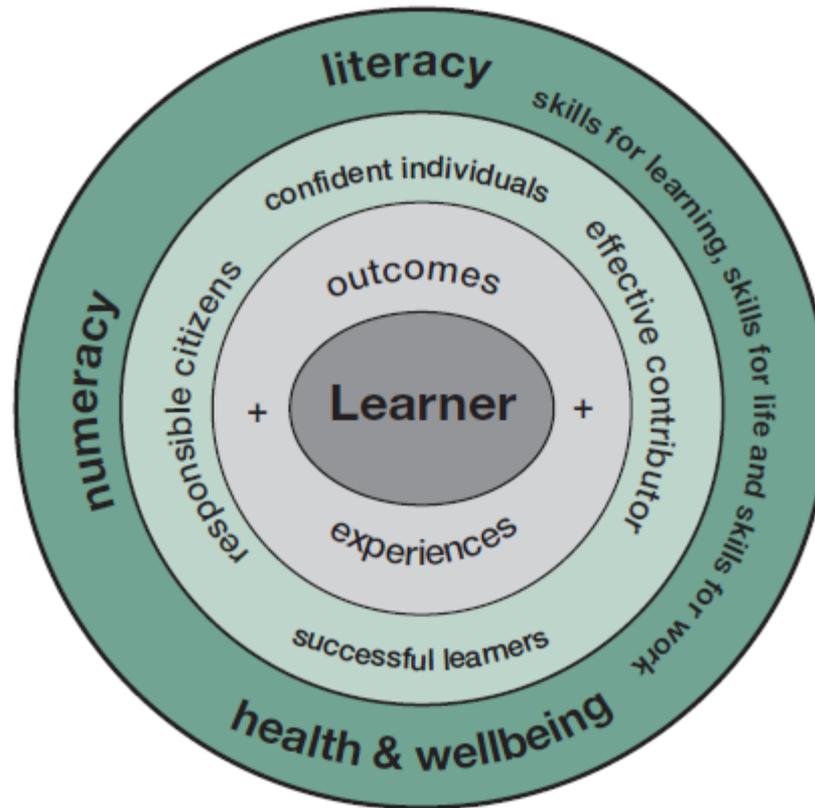
Donaldson Review of Teacher Education in Scotland:

- "the foundations of successful education lie in the quality of teachers and their leadership. High quality people achieve high quality outcomes for children."

- "We need teachers who can understand the broader context within which they are working. . . That means recognising and tackling 'wicked', persistent issues and having the confidence and capacity to do so successfully."

Staged Intervention Model

Provision
beyond
authority

Provision beyond
the school within
authority

Provision within school

Universal stage:

Ethos, culture and values

The School Years

Real Challenges
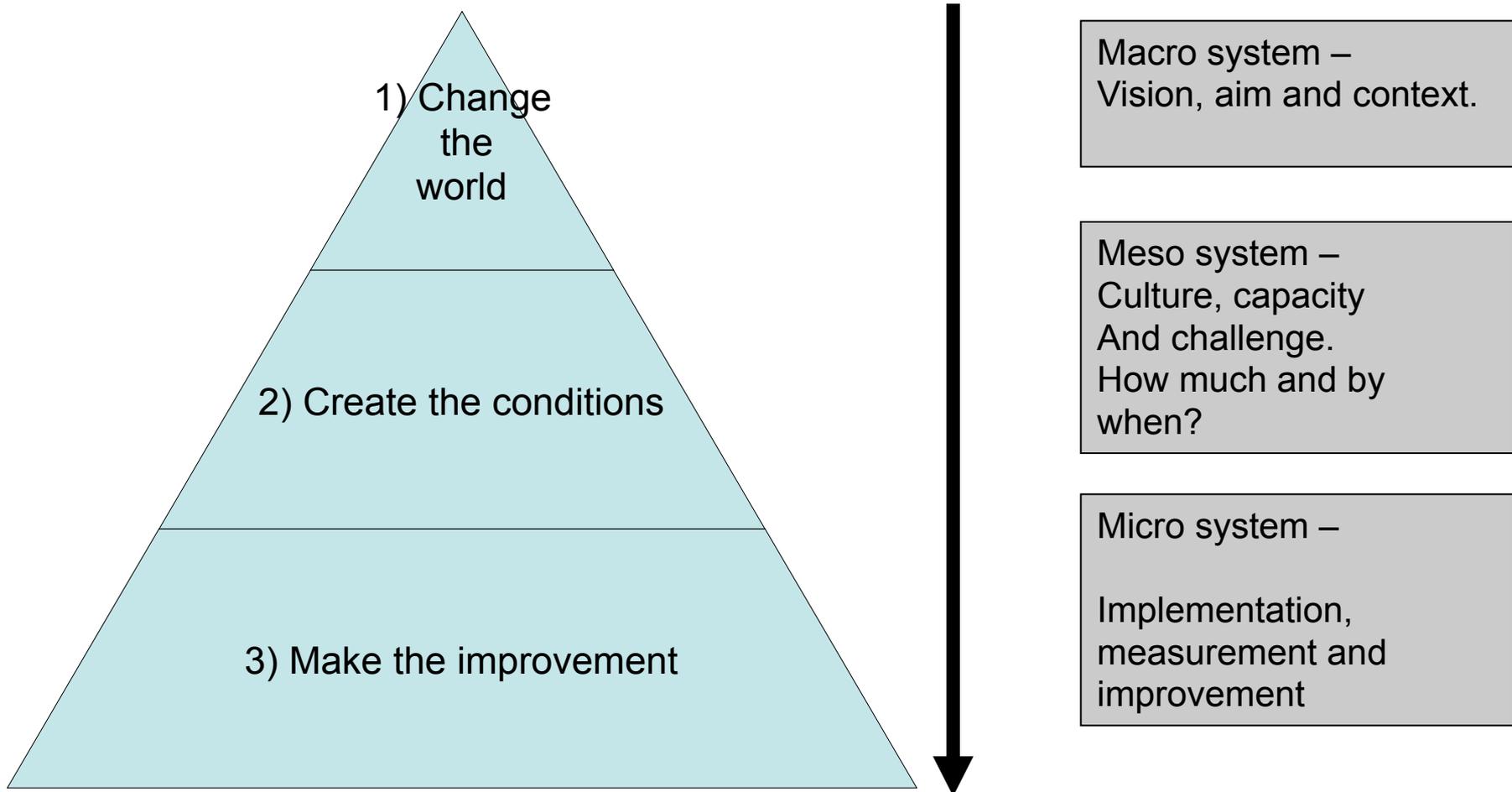- Deprivation and its persistent link with poor educational attainment
- Looked After Children

Successes
- Reduction in exclusions
- Increase in positive destinations
- Educational attainment results (relative to other countries) improving

Key Elements of Approach
- Curriculum for Excellence
- School Leaders/Quality of teaching
- Staged innovation/GIRFEC
- Evidence based on measuring what we value – evidence at local levels for local use
- A culture of responsible autonomy throughout the whole system

The 3-step Improvement Framework for Scotland's public services

1) Change the world

2) Create the conditions

3) Make the improvement

Macro system – Vision, aim and context.

Meso system – Culture, capacity And challenge. How much and by when?

Micro system –

Implementation, measurement and improvement

Step 1 - 7 points to change the world

- A compelling vision
- A story
- Actions/ Stepping stones
- Securing the improvement
- Engaging the workforce
- Making the change work locally (everywhere)
- Resilience and authorisation provided by a guiding coalition

Step 2 - Creating the conditions

•This is the meso-system's role: Capacity and capability building,

•It must communicate the changes, empower the citizens and workforce, model and change the culture.

The six questions to be asked of EVERY change programme:

1) Does everyone in the system know what we are trying to achieve?
2) Are we prioritising the improvements likely to have the biggest impact on the aim and stopping those that have little impact?
3) Is everyone clear about the means of securing improvement towards our aim?
4) Are we able to measure and report progress on our aim?
5) Do we know how and where to deploy resources when improvement is slower than required?
6) Do we have a way of testing and innovating and then spreading new learning?

Step 3 - Executing the change

•This is the micro-system's role: all improvement is local.

•Will and ideas are not enough at this level – we need execution. We need a theory of change and the ability to test and implement the changes.
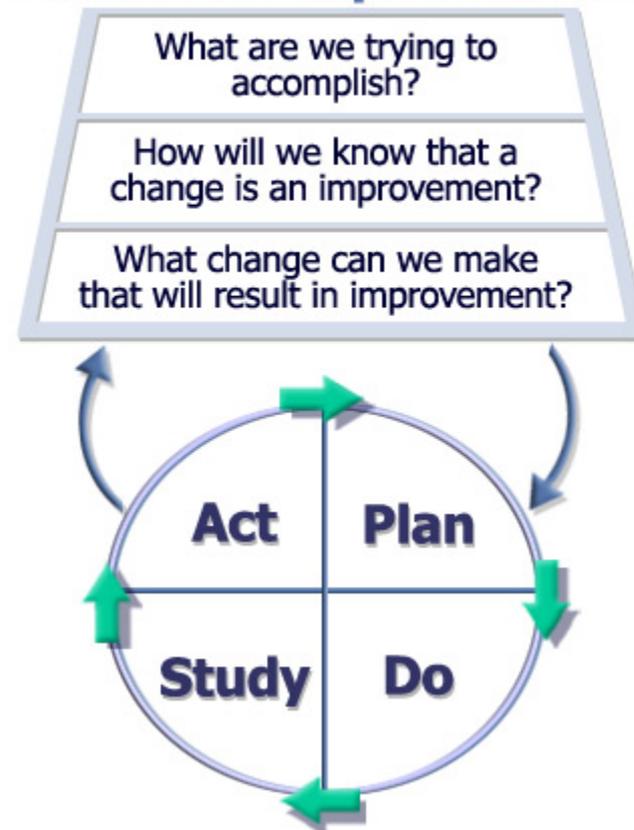
- There are many change theories and models. We must choose a small number of improvement methods and stick with them for the long haul.
- They must all be based on the simple formula of aims/measures and changes.
- Our selection may be;
  - ➢ Collaboratives
  - ➢ Benchmarking and competition
  - ➢ User/ Community empowerment
  - ➢ Performance management

- The choice must be explicit and evidenced.

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Act | Plan

Study | Do